Inclusion of the Excluded in Education: An Inter State Analysis of Universal Elementary Education in India

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'Educate a man, you educate one person, but educate a woman and you educate a whole civilization'.

Mahatma Gandhi

Abstract: *Development history of various countries has shown that Education is an essential instrument in uplifting the society from its different social and economic problems. Elementary Education is a fundamental right in Indian Constitution. Significant attempts have been made in the world in general and India in particular for achieving the Universal Elementary Education (UEE). World summits like Education for All (EFA) and Millennium Development Goals (MDG) gave strong foundation for UEE and gender equality in educational opportunity. In this context an attempt has been made to understand the performance of states in Inclusion of the Excluded in education. In this analysis girls and different religious and social groups are considered as excluded group. The important objective is to evaluate the performance of different states in the inclusion of this excluded group in education through the implementation of Sarva Siksha Abhiyan (SSA). It is based on available secondary data. Regression model has been used to understand the factors responsible for differential performance of the states. It is observed that educationally backward states have improved their expenditure on education considerably after the introduction of SSA. Lower Gender Parity Index indicating higher gender gap is observed in educationally poor states. Enrolment of Muslim students has improved significantly compared to other social groups. State expenditure on education, per capita income, sex ratio, NSDP and Girls enrolment found to be significant in explaining the differential performance of the states.*

Keywords: Education, Educational expenditure, Gender disparity and Social Group
Disparity JEL Classification, General Education, Educational Finance, Education and Inequality

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INTRODUCTION

Education is an essential requirement to uplift the society from various kinds of economic and social problems. Many economists argued that there is a positive relationship between education and economic growth (Solow (1957), Denison (1962), Lucas (1988), and Becker (1975). Development of educational opportunities enhances the social development and individual development simultaneously. There is a strong support for the argument that government intervention is very essential in delivering the public goods (Wagner, 1890); Peacock and Wiseman, 1961); Musgrave, 1969); and Lindhal, 2000).

For the past six decades the primary goal of education policy in India is to expand schooling opportunity in order to attain Universal Elementary Education (UEE). The objectives of National Policy on Education 1986, revised in 1992 were addressed during the Tenth Plan period mainly through the Sarva Shiksha Abhiyan (SSA) which is the flagship programme of Government of India being implemented in partnership with States and UTs. Substantial allocations were made by Government under this programme. The Government expenditure on Sarva Shiksha Abhiyan

(SSA) has more than tripled during the last seven years from Rs. 766.6 Million in 2005-06 to Rs. 2555.5 Million in 2012-13.

Inclusive growth is an instrument to resolve the problem of regional disparities of all kinds. Inclusive growth policy is an attempt to bring the backward sectors, backward regions, backward classes, women, and marginalized sections into mainstream. It is important to understand the problem of exclusion to have better inclusive policies. Inclusion in Education means providing education opportunity to all regardless of race, ethnicity, disability, gender, language, socio-economic status, and any other aspect. In the present paper girls, SC and ST categories, OBC groups and Muslims are considered as excluded group. An attempt is made to understand how far the existing education policies have promoted the inclusion of this excluded group in provision elementary education.

REVIEW OF LITERATURE

Social exclusion in education has been analyzed by several researchers. Some of the recent studies are presented below. Social exclusion of scheduled caste children from primary education in India and the comprehensive policy response for improving the access to educational opportunities of this disadvantaged group were analysed by Jenkins and Barr (2006). The paper suggested for a holistic approach to address the structural and basic causes of the problem. Fennell (2010) studied educational performance of the United Progressive Alliance (UPA) government's achievement as against Non-Democratic Alliance (NDA). The study observed that UPA government policy was focused more on legislative and administrative changes rather than on programme and consequently the marginalized groups were excluded from education during this period. It concluded that without greater emphasis on institutional delivery, innovations in the legal and administrative framework does not result in desired change. In a study on working towards inclusion: reflections from the classroom, Singal (2008) explored development activities towards educational inclusion in India. The study argued for provision of knowledge and skills to stakeholders for developing inclusive teaching practices. A Participatory Action Research by Polat (2011) on inclusion in education: a step towards social justice discussed the theoretical relationship between inclusion in education and social justice. The study found that there are numerous barriers in the education system itself to attain social inclusion at national, community and at school levels. An empirical study of Ashley (2005) made an attempt to understand the process involved in mainstreaming the out of school children from non-formal education system to formal schooling system. The study suggested for the involvement of the private schools management in providing education opportunity for out of school children. Some studies at the macro level (Rampla, 2000, Premkumar, 2006) have shown the correlation between literacy and development status of the states and literacy and state domestic product. An attempt has been made in this paper to analyse the trends in the inclusion of those excluded; the excluded group constitutes girls, socially backward and categories across different states in India.

OBJECTIVES OF THE STUDY

The main intention of this paper is to evaluate the educational performance of different states towards the inclusion of those who are excluded. The other objectives are;

* To analyse the trends in financing of elementary education in India
* To evaluate the performance of different states in the inclusion of those who are excluded in education.
* To identify the factors responsible for differential performance of the states.

METHODOLOGY:

The paper is mainly based on secondary data. Data relating to expenditure on education, literacy, per capital income, enrolment and other variables were collected from various government reports such

as MHRD Reports, Economic Survey and District Information System of Education (DISE) and Census. Coefficient of Variation was calculated to understand the disparity among the states, with respect to inclusion of girls and other social groups. Regression model is used to understand the factors responsible for differential performance of the states in inclusion. The model is specified as below;

$$Y_i = b_0 + b_2X_{1i} + b_3X_{2i} + b_4X_{3i} + b_5X_{4i} + \ldots\ldots\ldots + U_i$$

Dependent Variables:

GIRLEN= Girls Enrolment

SCEN= SC Enrolment

STEN= ST Enrolment

OBCEN= OBC Enrolment
MUSLIMEN= Muslim Enrolment

Independent Variables:

EDUEX= Educational expenditure

LIT = Literacy

PI = Per capita income

NSDP = Net State Domestic Product

POV = Poverty

SEXRA = Sex ratio

Statewise Expenditure on Elementary Education in India

Allocation of sufficient funds is the first step in improving access to education. Data relating to the share of expenditure on elementary education in the total expenditure on education of respective states is presented in Table-1. The data shows wider variations across the states. It varies from as low as 4.19 per cent in Lakshadweep in 2003-2004 to 68.84 percent in Jammu & Kashmir in 2009-10. The educationally backward states like M.P, Jharkhand, Chhattisgarh, Bihar, Assam and A.P have given higher priority to elementary education in their total expenditure on education. Though the mean percentage of expenditure on education has not improved much between 2003-04 and 2009-10 (around 30 percent) there is a considerable improvement in some states. The states can be grouped into three categories based on the changes in the share of money spent on elementary education after the introduction of SSA. The first category comprises the states which are already spending more (Arunachal Pradesh, Dadra Nagar and Haveli, Jharkhand, Karnataka, Nagaland) and continue to be spending the same amount. In the other category there are states where the share of expenditure has shown an increase. In states like U.P, Bihar, H.P there is an increase in the allocation. But in the case of the third category of states, there is a reduction in the allocations. For example during the first year of the introduction of SSA (2003-04), Madhya Pradesh, which is educationally backward state, has spent 80 per cent of the education budget on elementary education. However, this share has decreased considerably from 2004-05 onwards and it is 63.50 per cent during 2009-10. Same is the case with Tripura and Assam also. It is disturbing to observe that out of the 35 States and Union Territories, 16 states have shown decrease in share of expenditure on elementary education between 2003-04 and 2009-10. Six states have been maintaining same level. There is increase in 13 states. The increase is considerable in the states

of A&N, Bihar, Delhi, A.P, Nagaland, Rajasthan and U.P. There is not much change in rest of the states/UTs. The regional variation across the states in expenditure on elementary education can be judged by examining the Coefficient of Variation (CV) among the states. The CV decreased from 32.60 per cent in 2003-04 to 29.80 per cent in 2004-05 and it increased at 32 per cent in 2008-09and further decreased to 31.60 per cent in 2009-10 This implies that the variation continues to be around 30 per cent and it has not decreased after the implementation of SSA.

Table-1: Percentage of Public Expenditure on Elementary Education in Total Education Expenditure (Revenue Account)

STATES & UTs	***2003-04***	***2004-05***	***2005-06***	***2006-07***	***2007-08***	***2008-09***	***2009-10***
Andaman & Nicobar	47.95	49.35	48.34	49.66	49.78	53.29	52.94
AP	45.31	45.87	48.22	45.81	46.36	46.36	44.75
Arunachal Pradesh	64.02	64.36	63.46	67.41	68.18	68.28	60.18
Assam	60.44	60.96	63.38	57.03	60.06	55.09	56.36
Bihar	62.37	67.65	63.65	59.82	62.84	68.16	66.92
Chandigarh	26.75	35.82	29.43	26.38	26.96	31.9	31.49
Chhattisgarh	66.31	65.29	64.81	69.17	65.11	69.39	64.14
Dadar& N Haveli	69.21	72.77	69.63	68.13	68.52	73.02	65.8
Diu &	43.00	59.97	41.01	42.28	42.3	45.58	46.25
Delhi	18.22	33.12	26.53	30.89	32.93	22.44	19.64
Goa	20.4	20.44	21.58	18.61	20.08	19.09	21.36
Gujarat	52.02	55.13	55.14	56.38	54.17	54.02	54.09
Haryana	47.76	48.06	50.31	47.62	45.63	47.33	47.06
Himachal Pradesh	55.46	56.27	53.68	60.23	64.24	63.28	63.47
J & K	48.23	47.02	46.36	38.48	55.29	46.95	47.29
Jharkhand	68.72	71.28	64.77	67.94	69.17	66.68	68.84
Karnataka	55.01	57.8	56.33	55.48	54.16	55.66	53.69
Kerala	42.45	43.09	41.19	42.42	41.34	40.05	37.96
Lakshadweep	4.19	2.67	3.10	2.21	5.25	6.27	7.52
Madhya Pradesh	80.66	67.38	68.96	68.69	64.14	63.94	63.5
Maharashtra	43.74	45.9	42.2	44.86	43.94	46.39	44.99
Manipur	45.91	43.34	45.5	43.28	44.22	50.06	43.88
Meghalaya	54.41	51.13	54.06	51.13	50.36	48.82	48.62
Mizoram	52.88	55.49	55.49	52.36	51.63	49.88	51.67
Nagaland	57.93	62.97	61.41	63.88	64.18	64.49	62.38
Orissa	58.21	57.93	55.12	55.18	58.25	56.81	54.17
Pondicherry	38.43	39.81	39.04	37.81	36.48	38.13	35.52
Punjab	24.96	25.13	25.17	22.82	21.73	22.95	23.05
Rajasthan	56.65	57.59	60.34	58.92	59.94	60.27	59.43
Sikkim	49.14	48.25	47.32	47.93	47.63	45.99	34.87
Tamil Nadu	42.64	42.22	40.86	44	42.99	43.03	42.96
Tripura	57.31	56.54	52.86	43.08	41.33	38.82	38.08
Uttaranchal	46.77	42.34	43.39	45.46	45.79	63.25	63.76
Uttar Pradesh	57.76	56.62	58.12	56.49	61.89	65.86	45.41
West Bengal	33.36	37.37	38.73	37.21	36.74	35.33	34.76
Mean	48.53	49.91	48.56	47.97	48.67	49.34	47.34
CV	32.60	29.80	30.30	31.76	30.94	31.99	31.60

Sources: Various Reports of Budgetary Expenditure on Education in India, MHRD

Participation of Girls in Elementary Education in India

Equality between men and women is a matter of human rights and a condition for social justice and is also a necessary and fundamental prerequisite for equality, development and peace (Beijing Declaration, UN Fourth Conference on Women). Many scholars in the world have proved positive relation between women's education and economic development (Ramachandran, 2009). Neglecting women from educational opportunity is a waste of human resources in the country. Human capital and welfare economics theories have lead significant debate on the importance of women's education in economy. Education For All (1990 and 2000) and Millennium Development Goals (MDG) gave wider importance to the gender equality in all developmental activities in the system but history shows the gender bias against women in educational access due various social and economic reasons. Based on the experience gained, various provisions are made in the SSA exclusively addressing the gender disparity and to attain gender equity in all educational parameters. Inclusion of this group in the elementary education is analysed with two popularly used indicators, i.e. differences in school enrolment and Gender Parity Index (GPI).

Gender Gap in Enrolment at the Level of Elementary Education in India

Under SSA Government of India has launched two focused interventions for girls - the National Programme for Education of Girls at Elementary Level (NPEGEL) and the Kasturba Gandhi Balika Vidyalaya (KGBV) to reach out to girls from marginalized social groups. The KGBV aims to improve the literacy rate of the women, belonging to SCs, STs, OBCs and Minorities (GOI, website). Table 2 shows percentage enrolment of girls and boys to total enrolment to elementary classes during 2005-06 and 2010-11. It is disturbing to observe that out of 35 States and UTs only three states show higher enrolment of girls than the boys in 2005-06 and it increased to five states in 2010-11. The highest gender gap is observed in Bihar (13.06) followed by Rajasthan (10.74), Lakshadweep (8.34) in 2005-06 and Punjab reported highest gap (11.76) followed by Haryana (9.32),
Gujarat (7.82) and Dadra and Nagar Haveli (6.78) during 2010-11. The gap is higher in educationally backward states. However, the lowest gap is observed in Pondicherry (-2.96), followed by Sikkim (-1.14) and Meghalaya (-1.24) during 2005-06 and in Meghalaya (-2.00), Lakshadweep (-0.74), Assam (-0.16) and West Bengal (-0.16) in 2010-11.

CV shows regional disparity among the states in achieving gender equality. The CV of boys decreased from 10.31 per cent to 3.1 per cent, which indicates a significant decrease in regional disparity in boys' elementary enrolment among states, but there is a sharp decrease with respect to the girls' enrolment. However, the CV of gap between girls' and boys' enrolment decreased from 116.8 percent to 88.07 per cent during 2005-06 to 2010-11 period which indicates decreasing regional disparity among the states in reaching gender equity in enrolment.

Table: 2 Percentage of Girls and Boys Enrolment to Total Enrolment at Elementary level during 2005-06 to 2010-2011

States/UTs	*2005-06*				*2010-11*			
	Boys	***Girls***	***Total***	***Gap***	***Boys***	***Girls***	***Total***	***Gap***
Andaman & Nicobar	51.73	48.27	48298	3.46	51.36	48.64	53353	2.72
AP	51.17	48.83	11122940	2.34	51.11	48.89	11272063	2.22
Arunachal Pradesh	52.75	47.25	252302	5.5	51.33	48.67	332065	2.66
Assam	50.8	49.2	3952262	1.6	49.92	50.08	5822163	-0.16
Bihar	56.53	43.47	13397041	13.06	51.65	48.35	19974702	3.3
Chandigarh	54.2	45.8	119056	8.4	54.79	45.21	149002	9.58
Chhattisgarh	52.13	47.87	4807510	4.26	51.04	48.96	4637444	2.08
Dadar&N. Haveli	54.21	45.79	39202	8.42	53.39	46.61	59064	6.78
Diu & Daman	53.76	46.24	24163	7.52	53.03	46.97	26143	6.06
Delhi	53.05	46.95	2218952	6.1	53.44	46.56	2710483	6.88
Goa	52.77	47.23	138028	5.54	52.15	47.85	181923	4.3
Gujarat	53.69	46.31	7155000	7.38	53.91	46.09	8147024	7.82
Haryana	52.4	47.6	2084377	4.8	54.66	45.34	3475846	9.32
H P	52.47	47.53	1071820	4.94	52.75	47.25	1035627	5.5
J & K	54.47	45.53	1567137	8.94	52.88	47.12	1998138	5.76
Jharkhand	53.02	46.98	5307134	6.04	50.8	49.2	6840744	1.6
Karnataka	51.53	48.47	6914456	3.06	51.74	48.26	7670492	3.48
Kerala	51.03	48.97	3300546	2.06	50.77	49.23	3438905	1.54
Lakshadweep	54.17	45.83	9671	8.34	49.63	50.37	10285	-0.74
M.P	52.3	47.7	13535429	4.6	50.71	49.29	15493689	1.42
Maharashtra	52.75	47.25	14958687	5.5	52.99	47.01	16081769	5.98
Manipur	50.46	49.54	438075	0.92	50.35	49.65	503682	0.7
Meghalaya	49.3	50.7	433524	-1.4	49	51	660129	-2
Mizoram	51.36	48.64	220086	2.72	52.38	47.62	235327	4.76
Nagaland	50.88	49.12	421879	1.76	50.82	49.18	411383	1.64
Orissa	52.25	47.75	5842193	4.5	51.38	48.62	6556425	2.76
Pondicherry	48.54	51.46	140999	-2.92	51.59	48.41	182627	3.18
Punjab	53.52	46.48	2400065	7.04	55.88	44.12	3964427	11.76
Rajasthan	55.37	44.63	11677476	10.74	54.11	45.89	12003827	8.22
Sikkim	49.43	50.57	117759	-1.14	49.86	50.14	126542	-0.28
Tamil Nadu	51.81	48.19	9754697	3.62	51.5	48.5	9797264	3
Tripura	52.03	47.97	697687	4.06	50.99	49.01	610098	1.98
Uttaranchal	52.7	47.3	30174852	5.4	50.31	49.69	32019087	0.62
Uttar Pradesh	50.72	49.28	347696	1.44	52.02	47.98	1638492	4.04
West Bengal	50.62	49.38	12592333	1.24	49.92	50.08	14931765	-0.16
All Districts	52.73	47.27	168283332	5.46	51.6	48.4	193051999	3.2
Mean	53.14	47.72	4779524	5.42	51.83	48.17	5515771	3.67
CV	10.31	3.59	136	116.81	3.11	3.35	131	88.07

Source: Various reports of DISE Flash Statistics

Gender Parity Index (GPI)

Gender Parity Index (GPI) is one of the important indicators to examine the gender equality in education during a particular period. GPI refers to percentage of enrolment of girls to boys in elementary education. In other words Gender Parity Index is the female to male ratio in enrolment/ participation in schools. It measures the number of boys and girls who are enrolled/attending recognized schools at a particular point of time (DISE Report, 2010). This measure does not include qualitative indicators like learning or transition from one grade to the next. GPI and Gender equality are not the same and parity does not measure progress towards gender equality but it tells about the ratio of the girls to boys in a specific educational set ting (Ramachandran, 2009).

The Gender Parity Index at elementary level for the period of 2005-06 to 2010-11 is presented in Table 3. It is observed that gender parity has improved considerably in 2010-11 compared to earlier period. GPI is consistently increasing from 0.90 in 2005-06 to 0.93 in 2008-09 and to 0.94 by 2010-11. Out of 35 States/UTs only three states in 2005-06, four in 2008-09 and five in 2010-11 have achieved higher than one per cent of girls enrolment. Based on GPI, states can be classified into two groups. In the first group there are three states which have higher than one per cent in GPI (Meghalaya, Sikkim, Manipur, Lakshadweep, West Bengal and Pondicherry). In the second group there are states which have shown least performance in GPI. These states are Bihar, Rajasthan, Diu and Daman, MP, Chandigarh, Punjab, J & K, Gujarat and Haryana. It is disturbing to observe that educationally backward states like Bihar, Rajasthan, MP etc., have shown poor performance in GPI. This shows that the states which are educationally backward have lower gender parity. However these educationally backward states show improvement in GPI consistently by 2010-11. States like Bihar, Assam, Arunachal Pradesh and others have reported consistent improvement in GPI during consecutive period. The CV decreased from 6.76 per cent in 2005-06 to 5.74 per cent in 2008-09 and it further decreased to 6.39 per cent in 2010-11.

Table: 3: Statewise Gender Parity Index in Elementary Education

States/UTs	*2005-06*	*2008-09*	*2010-11*
Andaman & Nicobar	0.93	0.94	0.95
AP	0.95	0.97	0.96
Arunachal Pradesh	0.90	0.92	0.95
Assam	0.97	0.99	1.00
Bihar	0.77	0.89	0.94
Chandigarh	0.85	0.82	0.83
Chhattisgarh	0.92	0.95	0.96
Dadar&N. Haveli	0.84	0.88	0.87
Diu & Daman	0.86	0.91	0.89
Delhi	0.89	0.87	0.87
Goa	0.90	0.91	0.92
Gujarat	0.86	0.87	0.85
Haryana	0.91	0.90	0.83
H P	0.91	0.90	0.90
J & K	0.84	0.88	0.89
Jharkhand	0.89	0.96	0.97
Karnataka	0.94	0.94	0.93
Kerala	0.96	0.97	0.97
Lakshadweep	0.85	1.00	1.02
M.P	0.91	0.95	0.97
Maharashtra	0.90	0.89	0.89
Manipur	0.98	1.00	0.99
Meghalaya	1.03	1.04	1.04
Mizoram	0.95	0.95	0.91
Nagaland	0.97	0.96	0.97
Orissa	0.91	0.95	0.95
Pondicherry	1.06	0.93	0.94
Punjab	0.87	0.84	0.79
Rajasthan	0.81	0.82	0.85
Sikkim	1.02	1.03	1.01
Tamil Nadu	0.93	0.94	0.94
Tripura	0.92	0.95	0.96
Uttaranchal	0.90	0.97	0.99
Uttar Pradesh	0.97	0.94	0.92
West Bengal	0.98	0.98	1.00
All India	0.90	0.93	0.94
MEAN	0.92	0.93	0.93
CV	6.76	5.74	6.37

Source: Various reports of DISE Flash Statistics

Inequality in Elementary Education among Social Groups

There are well known substantial differences in wellbeing across social groups in India. Average per capita income of SC/ST at all India level is about one third lower than among other groups. The SCs, STs, OBCs and Muslims were lagging behind in the utilization of educational opportunities. According to NSS 64th round about 50 per cent of SC & ST children were unable to enroll in schools. However, it is impossible to achieve the UEE without inclusion of these excluded.

Percentage of SCs, STs, OBCs and Muslim enrolment to the total enrolment in elementary level is presented in the Table 4. In 2007-08, the share of SCs, STs and OBC in total enrolment at elementary level has decreased marginally between 2007-08 and 2010-11 But, the enrolment of Muslims has increased from 9.95percent to11.5 percent during same period.

The share of SC enrolment to total elementary enrolment varies from lowest of 0.03 per cent (Nagaland) to highest of 49.19 per cent (Punjab). However, Uttar Pradesh (27.34), Uttarakhand (26.18), West Bengal (26.81) and Tamil Nadu (24.63) had much higher percentage than the all India level. Andaman & Nicobar (0.04), Lakshadweep (0.07), Mizoram (0.16) and Meghalaya (0.03) have reported less than one per cent SC enrolment. On the other hand, in the case of ST enrolment, three states from Northeastern region, mainly Meghalaya (91.59), Mizoram (98.49) and Nagaland (91.58) have above 90 per cent of ST enrolment. While Lakshadweep also reported above 90 per cent, Arunachal Pradesh (76.79) and Dadra Nagar & Haveli (67.78) have reported more than 50 per cent of ST enrolment. Haryana (0.57), Chandigarh (0.09), Punjab (0.27) and UP (0.58) have recorded less than one per cent in ST enrolment.

The enrolment of SC and ST students reflects the presence of SC and ST population in respective states. The states and Union Territories with higher share of SC and ST in the population has greater share of SC and ST student enrolment. For example Punjab with a 30 percent of SC population according to 2011 census has 49.19 per cent of SC enrolment to total enrolment. But Chandigarh with an SC population of 17.5 percent has only 10.32 percent in enrolment.

During the period 2007-08 and 2010-11 the percentage of enrolment of OBC decreased from 42.22 per cent to 40.14 per cent. However, TN, Kerala, Bihar, Karnataka and UP have achieved above 50 per cent of OBC enrolment in elementary classes. While states like Bihar, Diu and Daman, Jharkhand and Manipur have reported increasing enrolment. Karnataka state shows significant decrease in OBC enrolment from 51.72 per cent in 2007-08 to 0.89 per cent in 2010-11.

The percentage share of Muslim enrolment has increased from 9.95 per cent in 2007-08 to 12.5 per cent in 2010-11 period. Number of states like J & K (61.85), Assam (27.47), West Bengal (WB) (25.25) and Karnataka (13.21) have much higher share in elementary level. States like Arunachal Pradesh (0.04), Chhattisgarh (0.64) and Northeast states like Mizoram, Nagaland and Meghalaya have reported less than one per cent in Muslim student enrolment.

The Coefficient Variation (CV) captures the regional disparity among the states in enrolment of different social groups in the states. The CV is highest in Muslim (181) enrolment during 2007-08 and comparing with other social groups indicates larger disparity in Muslim enrolment; it decreases to 141 per cent during 2010-11. But CV of SC enrolment has increased from 76.70 to 79.88 indicating regional disparity increase during the period followed by ST and OBC enrolment in total enrolment share shows increase.

Table 4: Percentage of SCs, STs, OBCs and Muslims Enrolment to Total Enrolment - 2007-08 and 2010-11

States/UTs	% of SC Students Enrolment		% ST Students Enrolment		% OBC Students Enrolment		% Muslim Students Enrolment	
	2007-08	**2010-11**	**2007-08**	**2010-11**	**2007-08**	**2010-11**	**2007-08**	**2010-11**
Andaman & Nicobar	0.04	0.39	7.02	7.54	0.66	6.28	1.4	7.37
Andhra Pradesh	18.91	18.51	9.64	9.84	45.62	45.57	10.15	9.33
Arunachal Pradesh	0.68	0.27	75.95	76.79	0.39	0.32	0.04	0.39
Assam	9.68	9.41	15.57	15.33	24.15	25.61	28.85	37.77
Bihar	16.89	18.28	2.29	1.95	59.44	63.17	10.74	13.99
Chandigarh	10.61	10.32	0.13	0.07	1.17	1.43	3.44	4.98
Chhattisgarh	15.28	14.81	32.03	32.43	46.67	46.47	0.74	1.33
Dadra & Nagar Haveli	2.37	2.39	71.03	67.78	0.97	1.22	---	2.83
Daman & Diu	4.71	4.32	12.94	10.89	32.01	43.77	3.37	8.77
Delhi	11.97	10.26	0.31	0.34	10.97	5.45	6.44	14.73
Goa	2.53	1.97	7.85	9.12	9.54	8.42	2.3	9.16
Gujarat	7.98	7.70	18.41	18.12	49.9	50.11	4.56	8.45
Haryana	28.21	27.94	0.13	0.08	32.16	32.74	4.34	7.01
Himachal Pradesh	28.04	28.09	5.64	5.74	14.3	13.51	1.07	1.59
Jammu And Kashmir	8.85	8.42	13.09	14.64	6.54	8.86	58.92	66.80
Jharkhand	15.03	14.44	30.49	29.20	44.91	46.12	10.06	13.39
Karnataka	19.18	0.33	7.51	0.20	52.67	0.89	15.55	14.96
Kerala	11.28	10.67	1.93	2.55	61.81	61.56	20.54	30.50
Lakshadweep	0.07	0.07	99.59	97.68	0.31	1.75	99.93	90.78
Madhya Pradesh	17.59	17.21	23.59	24.31	42.37	43.07	3.23	4.47
Maharashtra	14.71	14.32	11.34	11.80	32.49	33.21	8.14	12.28
Manipur	3.68	4.25	42.68	44.93	8.89	11.33	---	7.28
Meghalaya	1.00	1.10	93.08	91.59	0.61	0.78	0.16	3.20
Mizoram	0.16	0.24	99.24	98.49	0.28	0.41	0.01	0.18
Nagaland	0.03	0.02	93.75	91.58	---	0.23	0.04	0.58
Orissa	19.96	19.49	25.35	27.05	35.7	37.41	1.65	1.62
Pondicherry	19.04	19.26	0.68	0.22	73.95	69.84	6.42	7.27
Punjab	49.19	37.85	0.25	0.02	16.65	13.30	0.41	1.36
Rajasthan	19.48	20.23	14.97	15.52	48.53	47.62	4.9	6.61
Sikkim	6.80	7.26	36.1	37.15	40.07	39.19	NR	0.78
Tamil Nadu	24.65	24.41	1.88	1.71	68.99	68.77	4.74	5.50
Tripura	19.46	19.65	38.95	39.72	17.79	17.86	7.25	9.87
Uttar Pradesh	27.34	27.94	0.63	0.69	49.89	49.83	8.91	9.86
Uttarakhand	26.18	25.81	3.77	3.39	21.46	23.99	12.71	14.75
West Bengal	26.81	26.55	6.27	6.87	5.77	6.03	25.48	30.12
All Districts	**19.83**	**19.60**	**10.95**	**10.70**	**42.22**	**40.14**	**9.95**	**12.50**
MEAN	13.95	13.16	25.83	25.17	27.36	26.84	11.11	13.12
CV	79.42	78.08	122.62	123.18	83.55	84.19	177.44	141.00

Source: Various reports of DISE Flash Statistics

Factors Responsible for Differential Performance of the States

Regression models are used to understand the factors responsible for differential performance of the states in terms of enrolment of girls and other social groups in elementary education across the states in India. The results are presented in Tables 5A to 5E. Log values are considered to reduce the outliers problem in the model. Dependent variables like Girls enrolment, SC enrolment, ST enrolment, OBC enrolment and Muslim enrolment are regressed over several independent variables such as educational expenditure of the state, literacy rate, Net State Domestic Product (NSDP), Per capita income, Poverty, Sex ratio and Girls enrolment.

In model 5A educational expenditure, per capita income and sex ratio are found to be significant at one and ten per cent level respectively. Sex ratio (5.47) has more significant

influence over Girls enrolment, followed by educational expenditure (1.67) and per capita income (0.20). The model has explained at 40 per cent.

Only Net State Domestic Product was found to be significant at 10 per cent level in SC enrolment. While educational expenditure, sex ratio and per capita income (unexpected sign) were found significant in ST enrolment, educational expenditure and NSDP were found significant in OBC enrolment. Poverty was found to be significant in Muslim enrolment. The models have explained at 39 per cent in the case of girls' enrolment, 47 per cent in SC enrolment, 36 per cent in ST enrolment, and 45 per cent in OBC enrolment and none of the variables were found significant in Muslim enrolment. But poverty has expected negative relation with Muslim enrolment. The analysis shows that at macro level, Educational expenditure, NSDP, Sex-ratio and Per capita income are important variables in explaining the variation in the enrolment of girls and other social groups in India.

Table 5A: Regression Model on Girls Enrolment

Variables	Coefficient	t-Statistic	Prob.
LOGEDEX	1.674941	2.958368	0.0059
LOGPI	0.200673	1.998588	0.0545
LOGSEXRATIO	5.477129	1.751435	0.0898
C	-14.01834	-1.48625	0.1473
R^2 = .402		Adjusted R^2= .3451	

Table 5B: Regression Model on SC Enrolment

Variables	Coefficient	t-Statistic	Prob.
LOGEDEX	0.979011	1.663088	0.1061
LOGNSDP	0.445224	1.722852	0.0946
C	-1.132388	-1.157115	0.2558
R^2 = .1653		Adjusted R^2 = .1134	
Dependent variable= SC Enrolment			

Table 5C: Regression Model on ST Enrolment

Variables	Coefficient	t-Statistic	Prob.
LOGEDEX	1.857049	2.421492	0.021
LOGLIT	1.317892	0.377180	0.708
LOGSEXRATIO	10.31198	3.377715	0.002
LOGPI	-0.468677	-6.79302	0.000
C	-33.26805	-2.29533	0.028
R^2 = .364		Adjusted R^2 =.268	
ST Enrollment			

Table 5D: Regression Model on OBC Enrolment

Variables	Coefficient	t-Statistic	Prob.
LOGNSDP	0.528744	2.015570	0.052
LOGEDEX	0.696122	1.766804	0.086
C	-0.489250	-0.835375	0.409
R^2= . 1483		Adjusted R^2=.095	
OBC enrolment			

Table 5E: Regression Model on Muslim Enrolment

Variables	Coefficient	t-Statistic	Prob.
LOGPOV	-0.134981	-0.435322	0.666
LOGSEXRATIO	1.019157	0.319944	0.751
LOGNSDP	0.018799	0.060332	0.952
C	-2.227288	-0.238219	0.813
R^2 = .013		Adjusted R^2=.092	
Muslim enrolment			

CONCLUSION

The paper analyzed the inclusion of the excluded in education with particular reference to girls and social groups in India. Statewise Government expenditure on education since the introduction of SSA to meet elusive goal of UEE was also analysed. In terms of government expenditure on education, the decreasing coefficient of variation suggested that the regional imbalance among the States/UTs has been coming down over a period of time. After the introduction of SSA, educationally backward states like M.P, Bihar, Jharkhand, Assam and A.P have given higher priority to education with around 50 per cent of the expenditure on elementary education. However, performance of Gender Parity Index shows that educationally backward states like Bihar, Rajasthan, Diu and Daman, MP, Chandigarh, Punjab, J & K, Gujarat and Haryana are not performing well in reducing large gap in enrolment of boys and girls. However, the CV of the GPI decreased from 116.8 per cent to 88.07 per cent during 2005-06 to 2010-11 period which indicates decreasing regional disparity among the states. Enrolment of Muslim students has improved significantly compared to all social groups. Moreover, the regression model confirmed that among several factors, Educational expenditure, NSDP, Sex-ratio and Per capita income were found significant in explaining the differential performance of the states with respect to gender gap and the enrolment of students from social groups in elementary education in India. Based on the analysis the study concludes that efforts to eliminate gender disparity and gaps in social groups have to go simultaneously. To achieve equality in education Central and State governments should have mutually supportive policies and programmes. There is need for the involvement of Non Governmental Organizations in sensitizing the people about gender equity and the importance of education in order to include these excluded groups in Universal Elementary Education.

REFERENCES

Ashley, Laura Day (2005): 'From margins to mainstream: Private school outreach inclusion processes for out of school children in India', International Journal of Educational Development 25, pp.133-144.

Fennell, Shailaja (2010): 'Educational Exclusion and Inclusive Development in India', RECOUP Working Paper No. 35, Department of International Development Jenkins, Robert and Eimar Barr (2006): 'Social Exclusion of Scheduled Caste Children from Primary Education in India' DRAFT OCTOBER5, 2006, Email: rjenkins@unicef.org and ebarr@unicef.org

NSS Report No 533: Education in India: Participation an Expenditure, 2007-08. ppA-95. Planning Commission Reports

Polat, Filiz (2011): 'Inclusion in Education: A Step towards Social Justice', International Journal of Educational Development,pp-50-58.

Ramachandra, Vimala (2009): 'Towards Gender Equality in Education', published by National University of Educational Planning and Administration, New Delhi Singal, Nidhi (2008): 'Working towards inclusion: Reflections from the classroom', Teaching and Teacher Education 24, pp-1516-1529.

Important Websites:

http://www.dise.in
www.education.nic.in
www.ssa.nic.in
www.jstor.org
www.repec.org
www.ssrn.com
www.sciencedirect.com
http://www.censusindia.net